

REMARKS

Of the twenty-four claims originally submitted for examination in this application all but four of the claims have been rejected on substantive grounds. Applicants have amended their claims and respectfully submit that all the claims currently in this application are patentable over the rejection of record.

The substantive rejection of record of all but the four claims of the present application, which are indicated to possess patentable subject matter, is predicated upon the teaching of International Publication No. WO 92/01696 to Bateson et al. The Official Action avers that the rejected claims are made obvious, under 35 U.S.C. §103(a), by the teaching of Bateson et al.

It is unnecessary to review the basis for the rejection of record. Suffice it to say, the Official Action states that applicants must show unexpected effects arising from the use of the acid, rather than the ester, in order to sustain patentability over Bateson et al.

Applicants have met this challenge. Applicants submit herewith a Declaration under 37 C.F.R. §1.132 comparing the process of the present application for manufacturing of a cephalosporin utilizing the novel acid compound having the structural formula II as a reactant with the synthesis route employed in the Bateson et al. process wherein the corresponding ester of the acid employed in the present application is utilized as a reactant.

As indicated in the Declaration, remarkable unexpected results were obtained when this reactant substitution over the prior art teaching was made. Whereas the same cephalosporin was obtained in yield of 30% when the process utilized in Bateson et al. was employed, the process of the present application resulted in the formation of the cephalosporin in a yield of more than double that obtained utilizing the Bateson et al. prior art

process, specifically 64%. Moreover, the purity of the cephalosporin product was such that further purification steps were not required. On the other hand, the product purity obtained in the Bateson et al. process was insufficient to be utilized in pharmaceutical applications. Thus, the cephalosporin product of Bateson et al. had to be purified by column chromatography.

These results meet the test imposed in the outstanding Official Action. Clearly, the showing presented in the Declaration under 37 C.F.R. §1.132, executed by Juan Colberg, an applicant of the present application, rebuts any presumption of obviousness created by Bateson et al.

It is emphasized that the process claims of the present application have been amended to be commensurate in scope to the scope of the claims. Thus, the process claims of the present application are limited to compounds having the same or similar structure to the compounds utilized in the Declaration. Specifically, the scope of the compound having the formula III has been limited to the compound compared in the Declaration.

In view of the amendment to Claim 1, Claims 3 to 6 becomes moot and have been cancelled. In further accordance with applicants' desire to limit the process claims to preferred embodiments, Claims 7, 9 and 13 have been limited to particularly preferred compounds of the formula III, the solvent, and the base, respectively. Similarly, Claims 16, 17, 18 and 19 are limited to preferred embodiments. Indeed, the latter three claims have been indicated to contain patentable subject matter. In addition, a new process claim, Claim 25, has been added. This claim emphasizes the preferred embodiment wherein R³ is para-nitrobenzyl. The remaining original process claims have been cancelled.

Applicants aver that the two product claims currently in this application, Claims 21 and 22, are patentable in view of the Official Action conceded novelty of these claims and the

unobviousness of the compound of these claims over corresponding esters disclosed by Bateson et al. Specifically, the compound of Claims 21 and 22, when utilized as a reactant, produces a very useful class of cephalosporins in significantly higher yield and purity than the applied prior art esters disclosed by Bateson et al.

The specification stands objected to for its failure to make reference to related applications from which it claims priority under 35 U.S.C. §120.

Applicants have amended the specification to introduce, after the title, a new section, Reference to Related Applications, wherein the parent nonprovisional application and its status as well as the earlier provisional application from which priority is claimed is set forth.

As such, the objection of the specification is removed and applicants are provided with the requisite support to obtain the benefit of the earlier priority dates provided by these applications.

The above amendment, remarks and enclosed Declaration establish the patentable nature of all the claims currently in this application. Notice of Allowance and passage to issue of these claims, Claims 1, 2, 7, 9, 13, 16-19, 21, 22 and 25, is respectfully solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Marvin Bressler", with a long horizontal flourish extending to the right.

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